AI85187-S-1

For 963-069-26 cable

Revision History

Rev	Description	Date	Initiated By	Approved
A	RELEASED	08/10/22	AHN	WLL
B	REVISED PER DCN102276	9/26/24	NAD	BNS
C	REVISED PER DCN104061	1/21/25	AFH	BNS
D	REVISED PER DCN105829	5/9/25	AFH	AHN

Tools needed:

- **Glenair tool 809-464 (Daniels Manufacturing Corporation tool UDT3) OR equiv.**
- **Glenair tool 859-205-26 (Crimp Dies)**
- **Glenair tool 809-465 (Daniels Manufacturing Corporation tool UDT5) OR equiv.**
- **Glenair tool 859-206 (Strain Relief crimp tools)**
- **Glenair 600-277 (VersaLink Socket assembly tool)**

Kit contents & description:

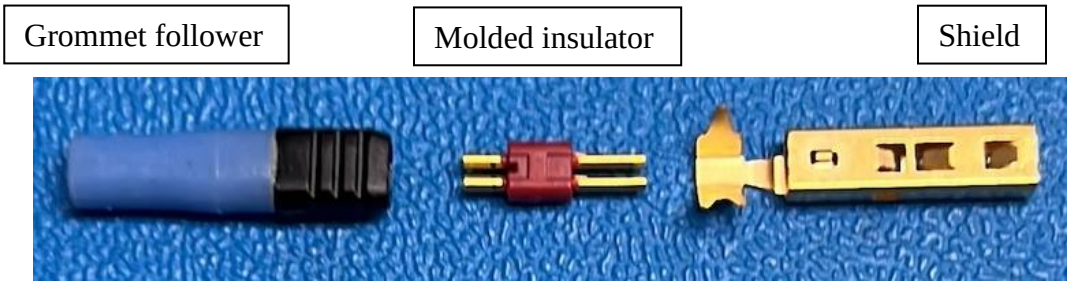

Figure 1: 853-046-01F kit components

This Assembly Instruction (AI) applies to all 853-046 base part numbers.

Procedure:

Step 1: Cable preparation

Slide grommet follower onto cable. Ensure black plastic end is closest to tip of cable. Slide heat shrink tube onto cable. Use Isopropyl alcohol if grommet follower does not slide onto cable easily. Cable ends must be cut cleanly and perpendicular to cable axis. Cable conductors are expected to "piston" during handling. To ensure conductors stay the same length, do not trim exposed conductors.

Figure 2: Clean cut cable

Step 2: Contact preparation

It is recommended to use a wire stripping laser to strip cable. Strip cable jacket 0.130". Trim braided shield and foil flush to cable jacket.

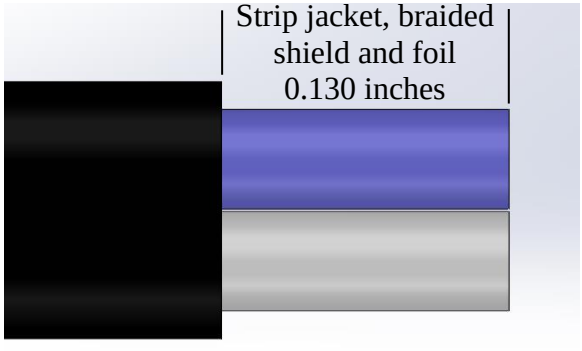

Figure 3: Stripped jacket, braided shield and foil

Strip inner conductors 0.090" and cable jacket 0.400". Remove cable jacket and insulation. Do not disturb inner conductors' twisted strands. Make sure braided shield does not ground to inner conductors. Trim braided shield as necessary.

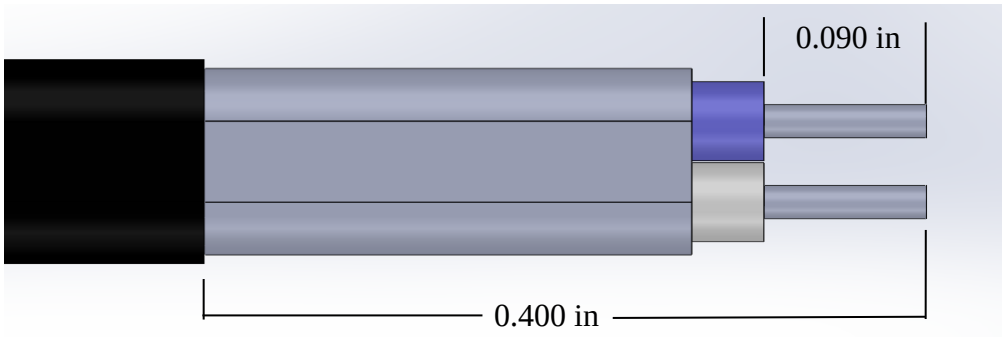

Figure 4: Ensure braided shield does not short to inner conductors

Step 3: Crimp contact

Molded insulator is symmetrical. Slide molded insulator onto inner conductors and crimp with crimp tool 809-464 and crimp die 859-205.

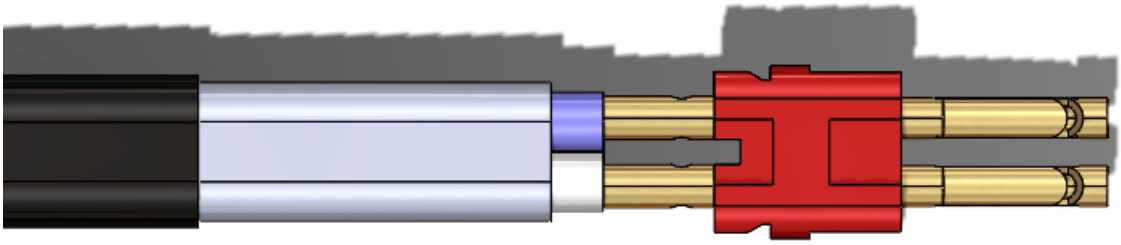

Figure 5: Crimping contact onto inner conductors

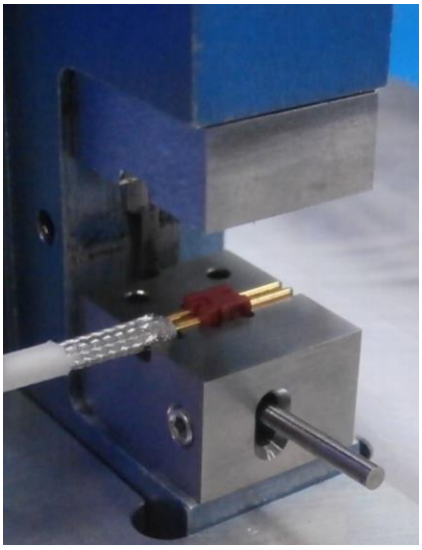

Figure 6: Crimping contact onto inner conductors using 859-205 die

Step 4: Insert insulator into shield

Insert shield into 600-277 tool. Ensure 600-277 rod is bottomed out inside 600-277 body.

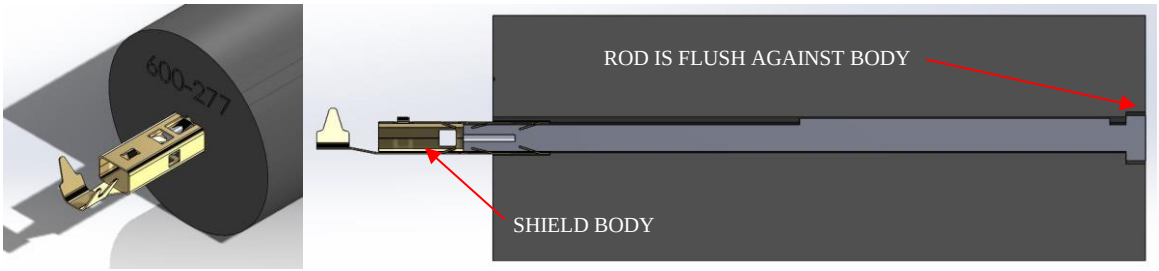

Figure 7: Inserting shield into tool

Verify desired pinout. Once fully inserted, molded insulator cannot be removed.

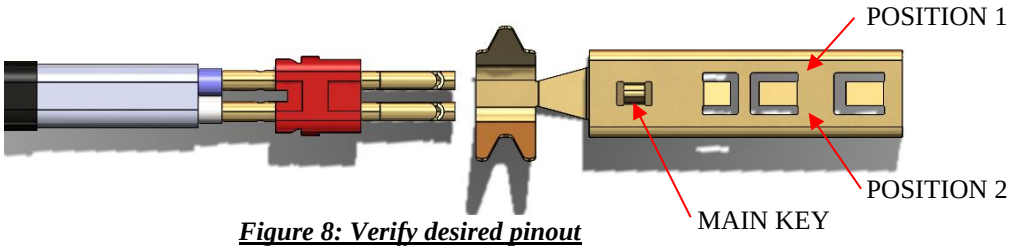

Figure 8: Verify desired pinout

Insert molded insulator into shield. Hold rod flush to back of body. Red molded insulator should be pressed against rod. Socket contacts should go into rod.

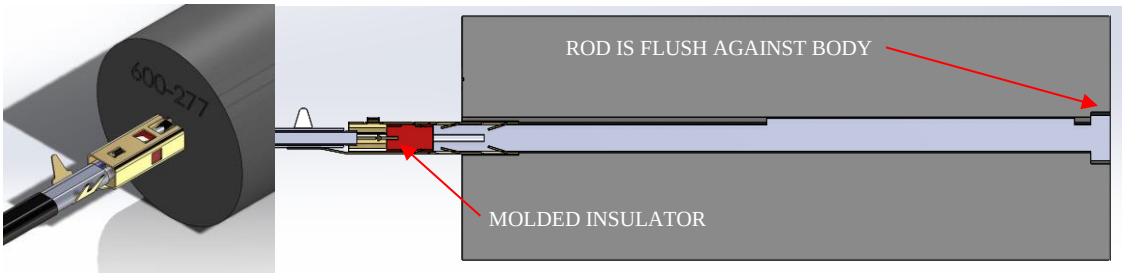

Figure 9: Insert molded insulator

Push rod out as insulator is fully inserted.

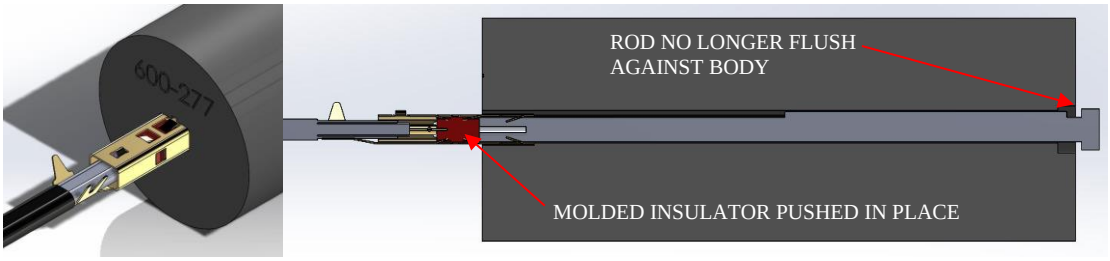

Figure 10: Pushing molded insulator into place

Insulator is fully inserted when notch is between both tines. Molded insulator is no longer removeable. Verify clip is fully engaged on back tines, see ***Figure 11***.

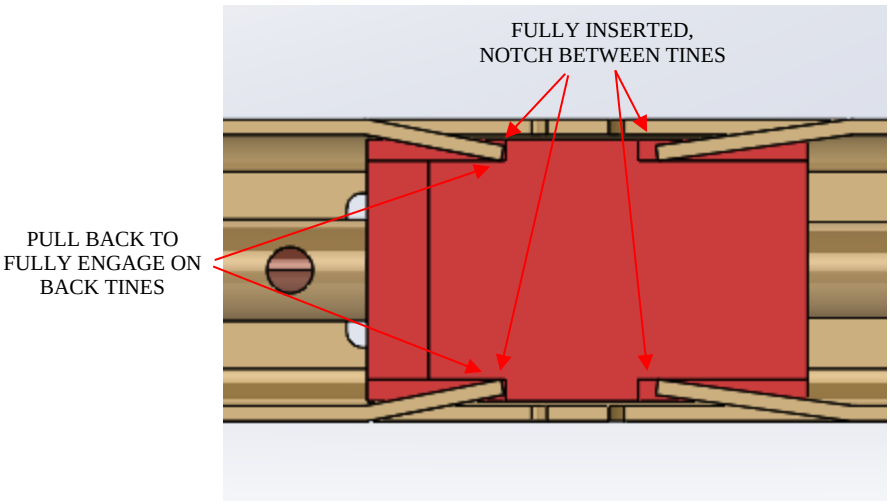

Figure 11: Verifying molded insulator is fully inserted

Step 5: Strain relief prep

Remove assembly from 600-277. Insert contact assembly into 859-206-SKT aligner. Make sure contact assembly is fully seated inside 859-206-SKT. Note orientation in figure.

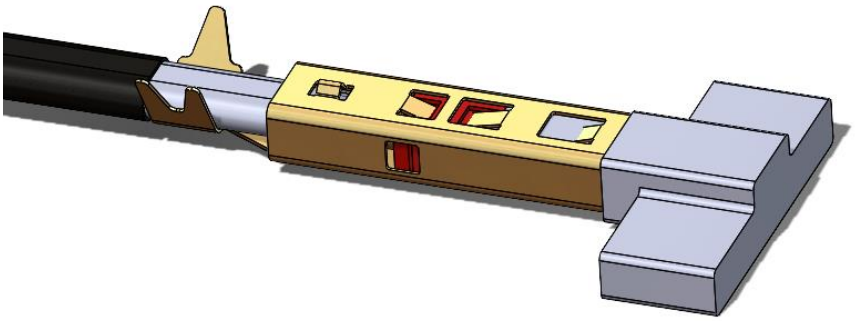

Figure 12: Inserting contact assembly into 859-206-SKT

Pre crimp shield strain relief using 859-206 Crimp A. Position assembly per figure before crimping.

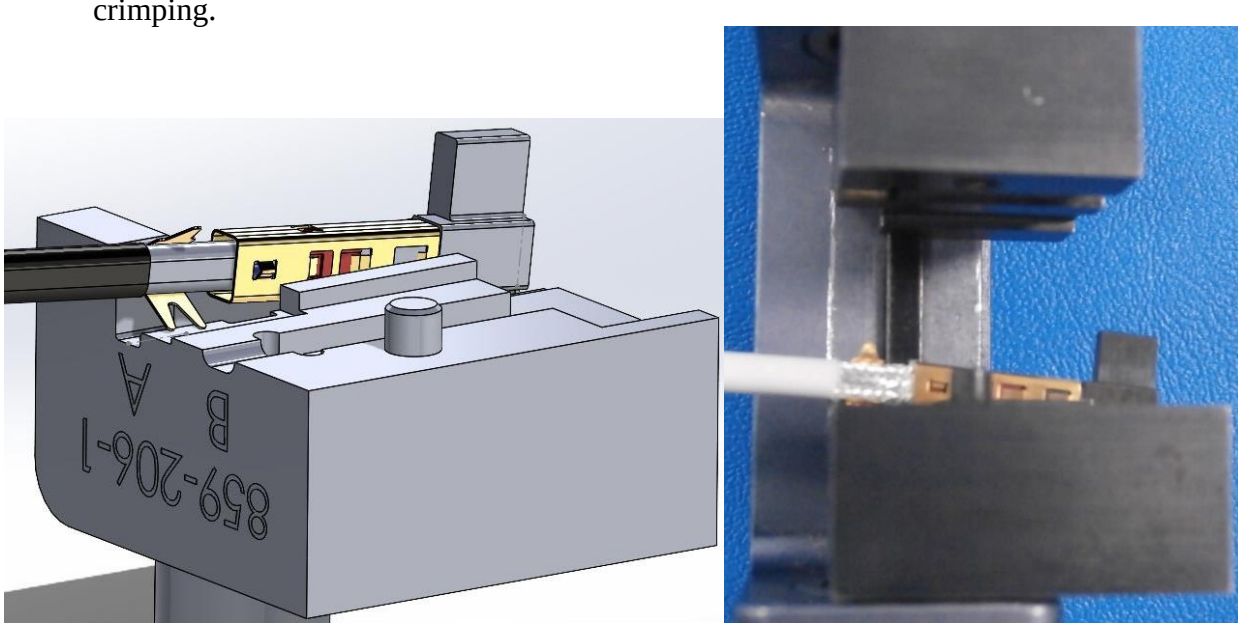

Figure 13: Pre-crimp shield using 859-206 crimp A

Step 6: Strain relief crimp

Move 859-206-S and cable assembly into 859-206 Crimp B per figure.

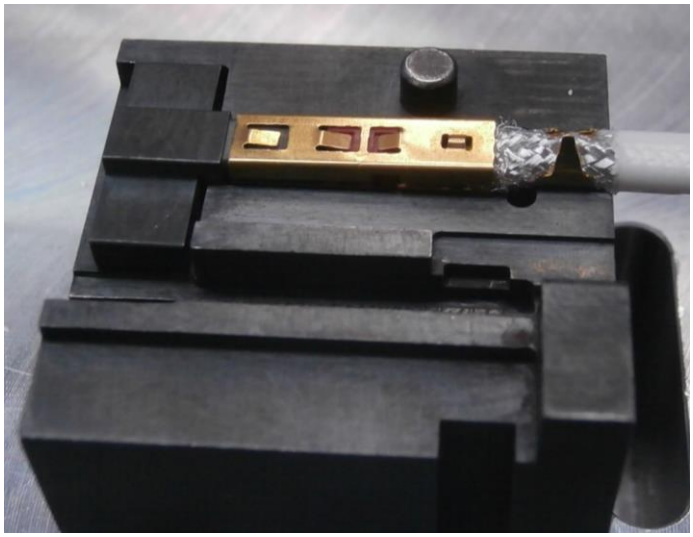

Figure 14: 859-206-S and assembly inside of 859-206

Crimp strain relief onto cable shield.

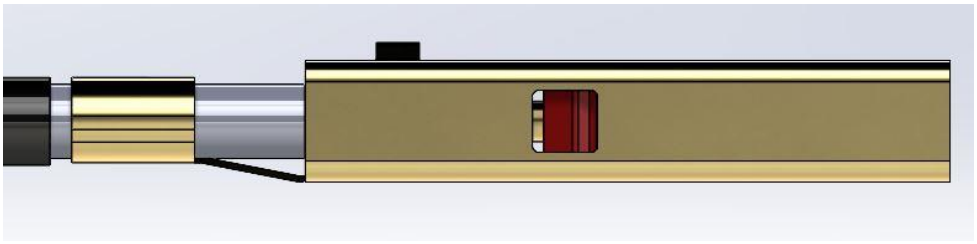

Figure 15: Crimped strain relief

Slide Grommet forward to behind buckle.

Figure 16: Final Assembly